



DRAFT MEETING MINUTES

HANFORD ADVISORY BOARD (HAB, Board)

River and Plateau Committee (RAP)

February 8, 2022

Virtual Meeting via Microsoft Teams

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This is only a summary of issues and actions discussed at this meeting. It may not represent the fullness of represented ideas or opinions, and it should not be used as a substitute for actual public involvement or public comment on any particular topic unless specifically identified as such.

Opening

Stan Branch, US Department of Energy (DOE), announced that this meeting was being held in accordance with the Federal Advisory Committee Act.

Ruth Nicholson, HAB Facilitator, welcomed meeting participants and notified the participants that the meeting was being recorded.

Tom Sicilia, Oregon Department of Energy, provided a review of the meeting agenda. He noted that he was trying something new that meeting and provided a “RAP Sheet” attachment in the meeting packet that provided additional information related to meeting topics and items of interest. He tried not to add any “spin” on the topics, just information. Should committee members find that useful as a resource, he would continue to provide it for future meetings.

Meeting Minute Approval

The committee adopted the November 2021 RAP meeting minutes without comment or revision.

Nominations for Chair and Vice Chair Elections

Ruth announced that the nominations received consisted of Tom Sicilia for RAP chair and Jan Catrell, Washington League of Women Voters, for vice chair. She called for any additional nominations but did not receive any. Members were invited to vote. The results would be announced later that day.

Tom Sicilia was ultimately elected as chair and Jan Catrell as vice chair.

Remedial/Removal Action Update and Tri Party Agreement Milestone Changes

A recording of the previous day’s presentation by John Price, Washington State Department of Ecology (Ecology), was played for the committee. In that recording John Price introduced himself as the TPA Section Manager for his agency. He noted that he was providing a presentation in place of DOE due to DOE presentation approval turnaround time.

He provided a background to the need for milestone changes. He noted that in 2016, the TPA agencies signed off on changes to 36 DOE Richland Operations Office (DOE-RL) milestones, which included milestones related to soil and groundwater contamination investigation, execution of cleanup plans for a selection of operable units (OU), and investigation and cleanup of Canyon buildings and adjacent contaminated soils. These changes were approved because they could not be completed as designed and scheduled due to low Congressional appropriations. Changes included extensions of ten years to finish investigations and over 18 years to finish non-Tank Farm, non-Canyon cleanups. The changes were based on a predicted DOE-RL budget of one billion dollars per year.

A Representative Analogous Site Coordinating Agency Liaisons (RASCAL) team was formed to mitigate milestone impacts and address new milestone objectives, including implementation of early remedial actions, acceleration of cleanup decisions, and application of consistent remedies across similar waste sites. This also included reduction in characterization prior to a Record of Decision (ROD), instead utilizing historical data and conducting focused confirmatory characterizations post-ROD.

In 2020, the TPA agencies reached consensus on the approach, but did not anticipate that DOE would be provided the funding to support it. A year later, the TPA agencies suspended 14 existing milestones that were either missed or were expected to be missed, allowing time for the TPA agencies to consider another approach for those 14 milestones.

The US Environmental Protection Agency (EPA) and Ecology asked DOE-RL for a plan for how several key factors would be addressed in the coming decades, such as the need for contaminated soil excavation balanced with debris disposal expectations at the Environmental Restoration Disposal Facility (ERDF) and the need for manpower balancing between multiple labor categories. Central Plateau Cleanup Company (CPCCo) proposed to use decision logic tools to address the questions around those key factors, and as a result, the TPA agencies agreed to leave those 14 milestones suspended until CPCCo provides that information. The results of their decision logic tools are anticipated in late 2022.

DOE-HQ developed and released the End State Contracting Model (ESCM), which has since been applied to the Central Plateau Cleanup Contract. Under this model, DOE issues task orders for discrete scopes of work for site closure, called end states. DOE and CPCCo were negotiating task orders for the three Federal Fiscal Years (FFY) 2023–2025, and DOE asked EPA and Ecology to negotiate new milestones in that FFY period to support DOE’s task orders to CPCCo. The TPA agencies at that time had conceptual agreement on 13 new milestones for that time frame.

John provided a review of the events. While negotiating the FFY22-24 new milestones, the TPA agencies suspended 14 existing TPA milestones, some of which had been missed due to Congressional appropriations levels from FY 2017 through 2021. The TPA agencies now appeared close to making an adjustment for those 14 milestones, and John expected that public information and participation opportunities on those would become available in the coming months, as new milestone dates were proposed. For the 13 milestones that the TPA agencies had conceptual agreement on, those milestones supported DOE’s ESCM and some of those milestones supported RASCAL objectives, including identification of early remedial actions. Ecology and EPA expected that DOE would provide future presentations to the HAB and information to the public such as fact sheets to explain the benefits of the new milestones.

Other TPA Agency Perspectives

Craig Cameron, EPA, introduced himself, noting that he worked with John as well as Mike Cline, DOE, and Mark French, DOE, on the near-term milestones. Basically, those milestones were a good faith effort to get some work done in the field while waiting on the modelling tools. Though he mentioned that the 13 milestones were new, they were in the works for a long time and covered existing scope, which had remedial investigations/feasibility studies (RI/FS) performed but halted due to differences in funding levels. By applying RASCAL principles into the sampling plans, with a focus on future sampling, they are able to get to the field sooner. He provided several examples, such as WA-1 characterization work, which was planned to be updated with the addition of Plutonium Finishing Plant (PFP)-related sites once PFP was taken care of. They also wanted to ensure there were lab studies performed to determine if there were other technologies or options to be applied to deep vadose zone contamination. Craig stated that he was not directly involved in the other 14 milestones, but Ecology had participation in those, such as coordinating with the permitting process and ensuring the State’s needs were met.

Kim Welsch, Ecology, added that the new OU 200-IA-1 was born of the original RASCAL negotiations. He stated that was a co-lead effort with EPA as the regulatory lead. The OU was designed to have shallow soils waste sites that were either easy to clean or obvious enough that they fell below cleanup levels such that they could be taken off the books. That OU was expecting a focused feasibility study in the coming weeks. Once that was received from DOE and evaluated, they would proceed with the proposed plan and ROD. This would be an important effort, followed by the OUs for soil sites in the Central Plateau.

Mike Cline introduced himself as director for soil and groundwater operations at DOE. He appreciated the presentation as it portrayed the history of the milestones changes well, in addition to showing that the historical means of scheduling milestones was no longer working. DOE realized that and was implementing a new approach using a decision logic tool. Though that tool would not make decisions for them, it factored in a lot of data points and would assist in making decisions. He expected that more information would be provided in future meetings when they were able to discuss or demonstrate the tool.

Committee Discussion

Esteban Ortiz, Green Latinos, thought that a point of interest for the general public, when it came to budgets, was the big question of “what is going on?” Specifically, they would want a short, sweet response on that, in regard to cleanup. They might ask why the budget timeline piece was not working well. Mike provided a short summary. He stated that, should a budget profile be chosen based on what the past and that turns out to be less than what was received in funding, the site would be immediately behind. That was shown to be a recurring theme, so something needed to change. As a result, DOE worked with the other TPA agencies to come up with an idea that worked.

Tom Sicilia stated that the RAP planned to develop its work plan for the following year in April. With a focus on developing actionable advice, it would be good to know about items of interest or concern two to five years out, such as deep vadose zone concerns.

Tom Galioto, Tri-City Development Council (TRIDEC) agreed with Tom Sicilia’s comment, stated it would be helpful to know what the milestones were as soon as possible to factor those into the HAB’s draft cleanup priorities advice. Additionally, he wanted to know if someone could explain how the public would be involved in reviewing and potentially influencing the milestones before they were finalized, as well as when it would be timely to influence those. Craig stated that, for near-term milestones, only public information would be provided. Difficult negotiations were undertaken to achieve what was done in that timeframe, and the TPA agencies did not feel that public comment would be beneficial. However, those milestones further out would be presented to the public, and the public would be provided an opportunity for change or influence. Those in John’s presentation would go out for comment. Timing was not yet available as DOE and its contractor were still putting together a tentative agreement, which then needed to be reviewed internally by legal personnel before it could be shared. The long-term items would most likely be put out for comment late that calendar year, after the modelling tool provided the necessary data.

Tom Galioto asked follow-up questions. In general, he stated, it seemed that the renegotiation process for milestones was focused on Congressional funding appropriations and that was the driving factor for delays in TPA-established milestones. It seemed that accepting delays due to funding was a necessary decision in the short term, but for the long term, he wanted to know what corrective actions were being taken. The most recent Hanford Site lifecycle cost report showed that the site would be considerably underfunded based on its need. He wanted to know what message could be sent to the White House or what could be done to break that cycle. Mark stated that he did not know what could be done to break the cycle, but understood the comment and frustration. DOE submitted compliance budgets but did not know that much else could be done to influence it. Going forward, the modelling tool would help prioritization based on risk. He noted that the milestones being discussed were small subsets of other work that was going on, so that did not affect items such as the 100K cleanup, 324 Building, or M-91 milestones. All that work was continuing as scheduled.

Tom Galioto wondered what pressure could be brought on Washington, DC or in what ways the budget cycle could be influenced. Mark stated that he or the HAB was free to try to influence. Everyone had their

priorities and made their requests for funding, and it was distributed accordingly. Making voices heard was likely all that could be done to make a difference. Craig contributed, stating that the modelling tool would assist in prioritization of milestones. Though that did not directly address the issue of not receiving adequate funding, it could help the argument for funding in the future by helping make a stronger case for its use. He noted that EPA as another federal agency could not lobby for DOE's funding, but other people could. He thought the results of underfunding, as seen that lifecycle cost report, was something that needed to be brought in front of people with the appropriate influence.

Chris Sutton, Public at Large, stated that, per that lifecycle cost report, it appeared that the plan called for about \$200 to \$300 million per year, but was instead receiving \$120 to \$140 million per year. He asked which funding level the negotiations previously mentioned were based on. Mike stated that, for the near term, those milestones were planned out and anticipated as achievable. They tried not to overcommit to funding levels above what was expected, and were instead planning to the lower funding level, if not below that. They wanted to set themselves up for success and show cleanup progress, both doing what made the most sense and demonstrating "bang for the buck."

Chris asked, given that expectation, if the lifecycle cost report had any real meaning or value as far as the HAB was concerned. If the plan called for high funding, was it worth putting any confidence in that plan? Craig stated that it was probably better seen as a tool or a listing of what needed to be done. The schedule was likely meaningless without receiving the funding needed but served as a tool to see the ideal scenario versus what could be done with the funding received.

Jan Catrell thanked the presenters and noted that she had been hearing about those milestones for years and now learned that they were suspended and pushed out. She asked for clarification as to why the milestones information was presented in a way that suggested they were currently in FY23. As John was not available to answer, Craig and Kim each suggested that it was likely because there were no FY22 milestones.

Jan asked, as the rest of the DOE complex was able to complete cleanup, if more funding would become available for the Hanford Site, considering its highly challenging technical and funding needs. She asked, as the Direct Feed Low-Activity Waste (DFLAW) program was the priority for the site, and as success breeds success, if there was an expectation that additional funding might be provided to address Central Plateau issues. As the site was an EPA Superfund site, how did EPA justify or explain the fact that so much of the cleanup had to be delayed based on funding alone? Mark stated that, for funding related to other site closures, he heard discussion of that nature for years, but it never seemed to work out that way when smaller sites closed. He expected that, if the Hanford site was able to get a flat, predictable level of funding, it would be able to get a lot of work done. Craig spoke to the EPA question. EPA recognized that a lot of work needed to be done, even if it was not an immediate public hazard as the site was closed off. However, it took such a long time to get through the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process to get to cleanup that it could not be put off in favor of tank waste. As an agency, however, EPA recognized that dealing with tank waste was a big deal and needed to be addressed.

Liz Mattson, Hanford Challenge, asked for detail as to how the modelling tool worked, at least to a basic level of what question it answered. Craig did not know and thought that would be better left for a presentation by DOE when ready. However, he guessed that it had to do with the immediate danger of individual sites, as well as other factors such as availability of the work force and need for soil fill at ERDF. It would help the decision makers most effectively sequence projects while examining the tradeoffs for various options. Kim noted that it likely included infrastructure and utility needs and

availability. Mike added that it was not just for milestones, but for all site cleanup. Liz stated that it might be worth discussing how to bring that information to the public in the future.

Tom Sicilia thought the tool sounded intriguing. He asked if it was related or connected to the Cumulative Impact Evaluation (CIE). He understood that the agencies could not lobby for funding, but with the availability of that tool, he wondered if it could be used to make a compelling case for a budget increase. Craig stated that the difference between the tool and the CIE seemed, to him, that the CIE was geared toward determining if cleanup levels were adequate for protection. The difference was the question being answered, with the CIE examining a more focused, technical question. Kim clarified that the CIE was more for physical evaluation of the environment, while the modeling tool was looking at risk from a project management perspective. Mike stated that the CIE was useful for quantifying risk and could potentially provide information that fed into the tool, even if not directly related.

Waste Encapsulation and Storage Facility

Gary Pyles, DOE, introduced himself. He worked with the DOE-RL office in the Project and Facilities Division.

He led his presentation with a safety message related to safety on roads in adverse conditions.

He reviewed the purpose of his presentation on the Waste Encapsulation and Storage Facility (WESF), which would focus on the Management of the Cesium and Strontium Capsules Project (W-135). The presentation was noted as informational.

Gary explained that the W-135 project had been split into four subprojects: The WESF facility, cask storage system, the Capsule Dry-Storage Area, and a mock-up facility.

The WESF facility was presently undergoing modifications, including installation of equipment for capsule transfer. When he last presented to RAP, DOE had just received approval to start construction and was in the mobilization stage. Construction has continued since, which included installation of operations gallery tubing and a compressor; a heating, ventilation, and air conditioning (HVAC) system; and truckport infrastructure. He stated that the facility modifications were expected to continue over the next year with the goal of completion by that same time the next year.

He provided a review of cask storage system progress. Test and production equipment fabrication was underway. Most of the test equipment was completed. Production equipment used in WESF would become the focus when the test equipment was complete. He provided a review of assembly of the cask-related equipment and other equipment that was in production. He noted that the automatic welding system gantry completion was delayed as a result of supply chain challenges, and the team was awaiting availability of certain electrical parts. Assuming all went well, all the equipment was expected to be installed by the end of FY22. Once the integration testing was complete, manufacturers would fabricate production equipment.

The last time the Capsule Dry-Storage Area was reviewed with RAP, DOE had just completed concrete pouring for cask storage. Over the last year, infrastructure such as lighting and fencing was installed. The construction crews walked through the facility with operations staff to assemble a punch-list for turnover. Many of those punch-list items were complete, with a few exceptions such as wiring installation, also due to supply chain issues. When those were complete, which would take about one week after the supplies were available, the facility could be turned over to operations.

A full-scale mockup was completely constructed and ready to accept test equipment.

In summary, he stated that significant progress was made in the project, a key Hanford risk-reduction program. Transfer of capsules to the dry-storage pad would allow the aging WESF facility to be deactivated, and the completed project would save up to six million dollars in annual operating costs.

A video was shown to provide a background overview of the project: <https://youtu.be/HJa2xCTvrg0>.

Regulatory Perspectives

John Temple, Ecology, stated he was pleased with the progress made and understood the supply chain challenges posed.

Roberto Armijo, EPA, echoed John's comments, stating that he looked forward to the future of the project.

Committee Discussion

Tom Sicilia asked how the supply chain issues would impact the milestone progress. Was it a day-to-day slippage or were they on track? Gary stated that he did not anticipate project completion in time for the milestone. He expected that the date would need to be renegotiated. The renegotiation would likely occur when the anticipated time for completion was more clearly known for upcoming construction steps as well as operations timing. As procedures and training were finalized, the team would have a better idea of how long it would take to load a cask. Tom noted that the project occurred in a unique environment and recommended that the core walls were sampled when possible. Gary thought that there was a plan to sample per the demolition plan but was unsure of the details.

Jan Catrell noted that she had been following the project for years and was interested in the aspect of equipment reuse from a previous project. She also stated that it was her understanding that the overpack worked in such a way that convection would move air through the casts without needing cooling. However, the video seemed to indicate that there was a need for gas injection. Gary stated that the gas would be in the universal capsule sleeves in the container. Helium just served as a medium for heat exchange within the container. Regarding repurposing, the video showed two pieces of equipment that were no longer needed for their original project. Each were in place, but one needed a modification to its lifting mechanism to meet the needs of the W-135 project.

Pam Larsen, Benton County, thanked Gary for the presentation, finding it interesting and encouraging. She recognized that the capsules posed a risk and was happy to see that close to resolution. She noted that the video mentions the previous Central Plateau contractor, a Jacobs company. Gary explained that CH2M Hill Plateau Remediation Company (CHPRC) held the previous contract and started the project. CPCCo picked up where CHPRC left off. Pam asked who owned CPCCo. It was confirmed that CPCCo consisted of Amentum, Fluor, and Atkins. Gary noted that much of the work done on the project was done by subcontractors. Those included fabrication by a company in Washington, WESF modifications were done by Apollo, and the Capsule Storage Area pad was being done by Intermech. Apollo and Intermech were each local to the Tri-Cities area.

Liz Mattson asked what the final milestone for capsule transfer was. Gary confirmed it was August of 2025, which was in danger of being missed as it was only built with a couple months of float. Liz asked if additional funds could fix the issue. Gary confirmed that it was an issue of logistics, and money would not solve it. There were a limited number of facilities or companies that could do the work to the required quality standards.

Richard Bloom asked for additional detail on the helium injection, asking if it was critical for cooling and if it was pressurized or neutral. Gary stated that it was neutral and was for the purpose of heat transfer within capsules.

Rob Davis, City of Pasco, thanked Gary for the presentation. He recalled that the Julie Reddick could be thanked for the project's advancement, as she took action and spearheaded the project. It was known for a long time that something needed to be done with the capsules, but it was not until 2007 that the concrete became an issue. Rob asked what the envisioned end state for the project was. Gary stated that the end state was the placement of all capsules in dry storage, being placed in the vertical casks and stored in the Capsule Storage Area. Rob asked what might be done to maintain security at that site long term and if it included some sort of installation such as a monument or a building around it. Gary stated that there was a waste determination was not yet made on those capsules, and as far as he knew, there was no disposition path for them. In the near term, the Canister Storage Building next door would be managing the pad.

Gary explained that, as part of the TPA milestone, DOE would be submitting a disposition strategy that looked at options for final waste disposition of low and high-level wastes. For the time being, there was no final path for the capsules. Rob thanked him, noting that it seemed to be a temporary measure by intention.

Tom asked what the life expectancy for the storage unit was, if known. Gary stated that the vertical casks and internal components were designated for a 300-year design life, but they were only taking credit out to 40 years. There was an aging management program in place for them. The 19th cask would serve as a monitor for that to ensure they lasted as designed.

Liz reiterated that there have been comments wanting to ensure that the concrete was tested after cask removal.

Round Robin

Tom Sicilia introduced the round robin topic: What does finishing cleanup mean to you?

He explained that the round robin was an opportunity for all members to provide perspective in a way that allowed people to feel comfortable speaking, including those that might be quiet otherwise. Members and participants were free to go into as much or as little detail as desired.

Tom started, noting that, for him, it seemed that there were different levels of "doneness." When there was a ROD, soil samples were sent to regulators, and that could be considered complete. However, there was still post-remediation groundwater monitoring, which was expected to be needed for at least 20 years. Then, when the long-term monitoring gets signed off by the regulators stating that it was no longer necessary to prevent risk to human health and the environment, which could be hundreds of years into the future, that was when cleanup was really done. Landfills would need to be monitored for a long time, and as long as they were monitored, there was potential for them to be reopened.

Chris Sutton stated that, to him, it means that all chemical and radionuclide contaminants of concern and risks to human receptors were minimal and met CERCLA guidelines, and by that point, Resource Conservation and Recovery Act (RCRA) guidelines would have been met as well. To him, it was based on risk. When there was minimal known risk, they were done. That included soil and groundwater.

Denise Jones, Citizens for a Clean Eastern Washington, agreed that there were different stages and metrics to decide when it was finished, but recognized the need for long-term and forever monitoring of the site.

Jan Catrell stated that she was a Washington State native that heard of Hanford when she was young. Her father made nitroglycerine for a living, which led to an interest in hazardous materials for her. She worked with Customs for a program that tried to harness orphan radioactive materials primarily surrounding the collapse of the former Soviet Union. As a result of that life experience, membership on the HAB seemed like a good fit for her. She was passionate about cleanup in her home state. For cleanup, she wanted every bit of it shipped to wherever it was intended for, regardless of where that was. She understood that it would take beyond the group's lifetimes to achieve that and was glad to be part of a group dedicated to making the best of that endeavor.

Liz Mattson likened it to the Notre Dame cathedral, stating that it was incredible to know that one was involved in building something that could take over 200 years to complete. She saw something potentially problematic in the idea of being finished. She agreed with idea such as the one that Chris posed, where there were parts that could be addressed, but expected that there would need to be caretaking forever. Even in isolation of the waste, it would need to be perpetually known to ensure that it did not release.

Mason Murphy, Confederated Tribes of the Umatilla Indian Reservation (CTUIR), noted that, when looking at the other sites across the complex, there was nothing quite like the Hanford Site, even among those that maintain pump and treat operations for decades. To him, he thought that cleanup completion went together with long-term stewardship. In the next 100 years, he did not think that his vision of clean would be achieved but would be advanced toward.

Ryan Miller, Ecology, agreed with much of what was said. He wanted to see Hanford cleaned up to the point that it was safe for people. At the least, he would like it cleaned to the point that there was not an imminent risk of release to the environment.

Miya Burke, Hanford Challenge, expected that the people making decisions in the present time as to what cleanup would look like would never actually see it. To her, she hoped for a future in which tribal members were able to return to the land for gathering of flora and fauna safely.

Richard Bloom stated that cleanup was a strange concept for Hanford. He thought that his vision for the site would be better described as "stable." There were a lot of parts that needed to be stabilized, such as tank farms. He compared it to Rocky Flats, which was not clean but was stable, and that was the best that could be hoped for.

Tom Galioto concurred with everything stated to that point. At a high level, he identified five items:

- Low-level waste remediated and sent to ERDF
- High-level waste processed and sent offsite
- Transuranic and mixed waste sent offsite
- Land released for public and tribal use
- Long term monitoring, as needed

He noted that he expected that the meeting's recording would serve as good input for the Issue Manager (IM) team on end states.

Rob Davis had ideas of how he would like the end state of the site marked, such as by the use of monuments. He thought that the end state needed to be one where the knowledge and lessons learned could be passed on. It would be a multi-generational journey to completion, and generations after needed to understand how important it was and how it was taken seriously, what was done with the waste, and the values behind those decisions.

After all participants were given the chance to speak, Tom Sicilia noted that the facilitator, Ruth Nicholson, skipped herself in the list. Ruth provided an observation, rather than an opinion. She explained that she had worked, as of that year, for 30 years as a professional facilitator. In that time, she has worked for FACA boards and several federal agencies, which included two “tours of duty” with the Hanford Natural Resource Trustee Council (HNRTC) and the HAB, as well as mediation between tribes and DOE. She observed that the HAB had something that many other groups she worked with over the years did not have, which was an unspoken agreement that the work was not done. That made tough times less difficult, as the group could always step back to that basic agreement. That was a gift that set the HAB apart.

Tom Sicilia invited any additional comments by email or by posting to the RAP’s Microsoft Teams channel.

Input to Draft Advice on Cleanup Priorities

Tom Galioto introduced BCC-sponsored advice on Hanford Site cleanup priorities. He explained that the purpose of the discussion was to provide RAP members an idea of the current state of the draft and to gather input on committee priorities. He noted that he had done the same for the Public Involvement and Communications Committee (PIC) the previous day, and the Tank Waste Committee (TWC) would be provided a chance the following day. The input would be discussed at the BCC meeting scheduled for the end of that week, then further in detail by the associated IM team. A completed draft was scheduled for presentation to the full Board in March.

Tom explained that the advice used three primary inputs in its development. Those included the HAB’s consensus advice on the topic from the previous year, which DOE expressed its acceptance of, as well as the updated Hanford 5-Year Plan, and comments from the Hanford 5-Year Plan public meeting. The format of the advice was the same as the previous year, with some small changes such as “crosscutting activities” being changed to “indirect/supporting activities.” He noted that the advice was focused specifically on the formulation year, despite considering an alternative proposal from DOE.

Tom went through the draft advice content, explaining key points in the background section and the arrangement of cleanup priorities items. He stated that the advice, if approved, would be sent to Brian Vance at DOE, as well as Ecology and EPA. Each were encouraged to respond on an item-by-item basis. Tom reviewed the individual cleanup priorities, focusing on RAP items.

In review of the WESF line item, Tom Galioto asked if the wording needed to be changed on based on what was learned in the day’s meeting. Tom Sicilia recognized that the project was running behind, but wanted it stressed that the project be done quickly. Richard Bloom suggested that the concern over WESF concrete sampling should be worked in, as it was a unique opportunity to evaluate the long-term effects of radioactivity on concrete.

For the Central Waste Complex (CWC) item, it was noted that progress was dependent on Waste Isolation Pilot Plant (WIPP) schedules for waste acceptance. There was a concern over container deterioration, so it was suggested that wording be added related to monitoring of opportunity for shipment to WIPP, ensuring that the Hanford place in queue was protected or maintained.

It was suggested that “remedial action work plan” be changed to Z-Cribs. Additional wording suggestions were made throughout the document.

Shelley Cimon, Columbia Riverkeeper, expressed her concern over an overarching issue. She stated that there seemed to be an assumption there would always be more money available in the future, which may not be true. The site’s cleanup operations were continuously generating orphan waste, with no

identification of what would be done with those wastes. She wanted to see planning occur for that, looking at those wastes in their totality over the long-term, including their costs.

Committee Business

The committee considered topics for its April meeting. Tom Sicilia asked if the TPA agencies had anything to bring.

Gary Younger stated that a remediation and removal activities update would be something he was looking into. Tom asked for an update on the 324 building as part of that. Gary noted that might be dependent on completion of a major item on the project.

Ryan Miller stated that he did not know of anything to bring forward from Ecology, but if there was a desire for any topic, he asked that the request be made.

It was noted that there was nothing new to share regarding holistic negotiations.

Chris Sutton requested a discussion on the CIE and Composite Analysis: their status, their role in decision making, and how those results were communicated to the public. Tom noted that the idea of a joint meeting with TWC was proposed but was unsure if April was a good time for that.

Tom asked if a site tour might be a possibility after April, as workers were going back to the site. Gary stated that “wheels on the ground” would not be available for some time, but he could schedule a virtual tour. The committee discussed and agreed that a virtual tour would be suitable for a full Board meeting item or public outreach opportunity, ideally held in the evenings. Items of interest for the tour could include items that aligned with the HAB’s cleanup priorities, after advice finalization.

It was noted that the committee should consider items for the leadership workshop.

Election results were announced.

Open Forum

Tom Sicilia introduced the topic as a chance to bring forth ideas, ask questions, or suggest topics for future consideration.

Chris Sutton hoped to discuss groundwater monitoring in the future. He noted that there were three groundwater programs on site, each performed in response to a different regulatory requirement: CERCLA RODs, RCRA, or the Atomic Energy Act. He explained that each had different sampling and analysis requirements, and potentially different criteria for completion. Tom agreed that would be a good topic. He noted that related items were discussed in the past as part of orientation. He also wanted to know how the ERDF and Integrated Disposal Facility (IDF) landfills would be monitored.

Liz Mattson suggested that a big-picture issue such as long-term stewardship, which could be framed for the public, would be good to consider as an agenda item for the future. Tom wondered if someone from the DOE Office of Management might be able to speak to that, though it would be tricky in the context of Hanford.

Rob Davis asked if there was a concise list of active pump and treat sites that were presently active. Tom noted that the Phoenix system provided a geographic information system (GIS) map overlay to see wells and their coverage. He considered the idea of a Phoenix and Administrative Record refresher as a future topic. Additionally, he posted a location where groundwater monitoring reports could be found:

<https://www.hanford.gov/page.cfm/SoilGroundwaterAnnualReports>.

Tom recommended that members explore the Hanford.gov website, as there was much to be learned there.

HAB Membership Packet for 2022 through 2023

Gary Younger provided a presentation to provide additional information as a follow-up to information presented to the HAB in its January 2022 meeting.

He reviewed the new information, first stating that it was announced that term limits would be enforced for HAB members, though they were always a part of the HAB membership agreement, just waived. Per new guidance from the White House, that was no longer acceptable.

He reviewed the HAB Memorandum of Understanding (MOU) membership definitions, explaining that members were categorized by Intergovernmental Agencies, Specific Interest Groups, and Public-at-Large (PAL). He noted that Intergovernmental Agencies seats were also subject to term limits, but DOE recognized that by nature of individuals being elected to government reduced the pool of candidates to draw from. If those groups were unable to put forth new members, the incumbents would be accepted.

Next, the Specific Interest Groups would be held to the six-year term limit. Those groups were also expected to seek nominations from within their organizations, and if they are unable to put forth new members, would need to discuss what was done to recruit. The bar for exception from policy was stated to be high. If an organizations membership was too low to recruit, DOE may consider having another group take its place.

The last group, PAL, had ten seats, though the MOU only listed four. Those additional seats were added with approval by Ecology and EPA. DOE was eliminating alternates for PAL going forward. He stated that alternates for other positions were staying for the time being but may change in the future.

Per the directives from the White House on diversity and inclusion, DOE was working toward making Board resemble the communities they represented more closely. This was not just for the HAB, but for other boards throughout the federal government. To determine this, DOE was looking at the census data for the five counties surrounding Hanford, including demographics data such as gender, ethnicity, age, and education.

Gary stated that diversity was a big focus for the White House. As an example, the Savannah River Site's board membership package was denied for having too few women. DOE worked toward adding women and Hispanics to the Board in its last membership package and hoped to continue that push going forward. Additionally, DOE hoped to add members with lower levels of college education to represent the demographics more accurately.

Gary asked for questions.

Jan Catrell asked for clarification on PAL alternates and term limitations. Gary stated that alternates were eliminated for PAL seats, and existing alternates were moved to open PAL seats. He stated that members would serve three separate two-year terms for a cumulative total of six years, regardless of the position served in. It was based on total time with the Board, not individual seats.

Ginger Wireman, Ecology, asked, before assuming that there are no more PAL seats open, if DOE could reach out to non-attending members to see if they had plans to attend. Additionally, she stated that if DOE planned to require people of lower education and age serve on the board, DOE would need to provide money to make that possible. She stated that it was unreasonable to expect such people to volunteer their time when considering that those people might be struggling otherwise. Gary stated that, regarding attendance, his team would reach out, and if there was an issue, that could be considered when the

member comes up for renewal. For members of lower age and education levels, he clarified that those were goals, and they were looking for opportunities in that realm, such as people working night shifts or weekend jobs.

Bob Suyama, Benton County, noted that there was an IM team working on the HAB's process manual. The MOU would require changes to account for the number of PAL seats, and the process manual would be impacted. As both documents needed to go through DOE-HQ for approval, he asked that the documents be sent jointly. Regarding the lack of alternates for PAL seats and the addition of PAL seats, he stated that the ability for the Board to achieve quorum was impacted. Finally, he heard mention in the Executive Issues Committee (EIC) that there were other restrictions being considered for alternates. He asked that Gary discuss that further.

Gary stated that he was willing to coordinate with Bob as the IM team leader to get the documents submitted together. Regarding PAL alternates, he explained in most cases members speak for organizations, so having an alternate available when an organization holds the seat made sense. For PAL, the members were effectively representing themselves. Further, as those members are not speaking on behalf of a group, PAL primary and alternate representatives may end up conveying diverging viewpoints from the same seat. He stated that may be something to reexamine in the future, should it become an issue, but for the time being it seemed easiest to have those function as a single-representative seat. Per Ginger's earlier comment, Gary stated that he and his team would work with PAL members to figure out any barriers to attendance. He suggested committee chairs reaching out may also help in that regard.

For alternates overall, Gary explained, DOE-HQ was putting together proposals, but there was nothing to announce at the time. HAB was the only board with alternates, and there was an effort in DOE-HQ to try to align as many functions as possible. He stated that he heard "rumblings" about alternates not being allowed to participate when primaries were present, but nothing was certain or in writing yet.

Tom Sicilia noted that, in the PIC meeting the previous day, someone requested that the new interpretation of the MOU be written out for clarity, and he thought that was a good idea. He wanted to clarify, given the short time to get membership-related paperwork submitted for that year, what the plan was for organizations that did not have time to recruit and needed to put forth term-limited members. He asked if DOE was creating a vacuum on the Board or just trying to "cast a wide net" and see what resulted. Gary explained that everything was being handled on a case-by-case basis. The presently vacant seat was DOE's present focus, so there was no intent to create a vacuum. He noted that DOE was reaching out to organizations, and most government agencies were working with them on packet submissions.

Chris Sutton provided a follow-up to Ginger's comment about potentially needing to reimburse certain groups for their time on the Board. He suggested that idea might be a worthwhile addition to a cleanup priorities advice item that discussed HAB funding and outreach. Even if the request in the advice was not granted, he thought that it might spur good conversation within DOE and among the TPA agencies. Gary clarified that Environmental Management Site-Specific Advisory Board (EMSSAB) rules stated that board members are volunteers, which meant that reimbursement was not allowed. However, DOE did reimburse primary seats for travel related to Board business, as well as *per diem*. He understood the hardships that some members faced in regard to dedicating volunteer time to the Board and was looking for means to solve those.

Closing Remarks

Tom Sicilia thanked everyone for participating that day. He noted that, should there be a topic of interest among the members, he was always available to help. He was planning to continue updating the RAP sheet and was open to suggestions for topics on that.

Meeting Recording

<https://youtu.be/U485RMuwXa8>

Attachments

[Attachment 1: Meeting Agenda](#)

[Attachment 2: Deputy Designated Federal Officer Slide](#)

[Attachment 3: Draft Meeting Minutes for RAP November 16, 2021 Meeting](#)

[Attachment 4: R.A.P. Sheet](#)

[Attachment 5: Ecology Presentation – Upcoming TPA Milestone Changes](#)

[Attachment 6: DOE Presentation – Waste Encapsulation and Storage Facility](#)

[Attachment 7: Draft Advice on Hanford Cleanup Priorities](#)

Attendees

Board Members and Alternates:

Bob Suyama, Primary	Dan Solitz, Primary	Denise Jones, Primary
Estaban Ortiz, Primary	Jan Catrell, Primary	Richard Bloom, Primary
Rob Davis, Primary	Robert Waldher, Primary	Shelley Cimon, Primary
Steve Anderson, Primary	Tom Galioto, Primary	Chris Sutton, Alternate
Liz Mattson, Alternate	Marissa Merker, Alternate	Mason Murphy
Pam Larsen, Alternate	Simone Anter, Alternate	Steve March, Alternate
Tom Sicilia, Alternate		

Others:

Gary Pyles, DOE	Dib Goswami, Ecology	Abigail Zilar, GSSC for DOE
Gary Younger, DOE	Ginger Wireman, Ecology	Dieter Bohrmann, CPCCo
Kelly Ebert, DOE	John Temple, Ecology	Jeff Lerch, CPCCo
Mark French, DOE	Kim Welsch, Ecology	Mark Buckmaster, CPCCo
Michael Cline, DOE	Ryan Miller, Ecology	Amber Peters, HMIS
Stan Branch, DOE	Craig Cameron, EPA	Dana Cowley, HMIS
	Roberto Armijo, EPA	Gabe Bohnee, HMIS

	Tom Rogers, Washington State Department of Health	Jen Colburn, HMIS
		Patrick Conrad, HMIS
		Miya Burke, Hanford Challenge
		Kaycee Bailey
		KB
		NP
		Josh Patnaude, HAB Facilitation
		Olivia Wilcox, HAB Facilitation
		Ruth Nicholson, HAB Facilitation

Note: Participants for this virtual meeting were asked to sign in with their name and affiliation in the chat box of Microsoft Teams. Not all attendees shared this information. The attendance list reflects what information was collected at the meeting.